

Joint Letter Brief -  
Redacted Version of  
Document Sought to be  
Sealed

BOIES SCHILLER FLEXNER LLP  
Mark C. Mao (CA Bar No. 236165)  
mmao@bsflp.com  
44 Montgomery Street, 41st Floor  
San Francisco, CA 94104  
Telephone: (415) 293 6858  
Facsimile: (415) 999 9695

SUSMAN GODFREY L.L.P.  
William Christopher Carmody (pro hac vice)  
bcarmody@susmangodfrey.com  
Shawn J. Rabin (pro hac vice)  
srabin@susmangodfrey.com  
1301 Avenue of the Americas, 32nd Floor  
New York, NY 10019  
Telephone: (212) 336-8330

MORGAN & MORGAN  
John A. Yanchunis (pro hac vice)  
jyanchunis@forthepeople.com  
Ryan J. McGee (pro hac vice)  
rmcgee@forthepeople.com  
201 N. Franklin Street, 7th Floor  
Tampa, FL 33602  
Telephone: (813) 223-5505

*Attorneys for Plaintiffs; additional counsel  
listed in signature blocks below*

QUINN EMANUEL URQUHART &  
SULLIVAN, LLP  
Andrew H. Schapiro (pro hac vice)  
andrewschapiro@quinnemanuel.com  
191 N. Wacker Drive, Suite 2700  
Chicago, IL 60606  
Telephone: (312) 705-7400  
Facsimile: (312) 705-7401

Stephen A. Broome (CA Bar No. 314605)  
stephenbroome@quinnemanuel.com  
Viola Trebicka (CA Bar No. 269526)  
violatrebicka@quinnemanuel.com  
865 S. Figueroa Street, 10th Floor  
Los Angeles, CA 90017  
Telephone: (213) 443-3000  
Facsimile: (213) 443-3100

Diane M. Doolittle (CA Bar No. 142046)  
dianedoolittle@quinnemanuel.com  
555 Twin Dolphin Drive, 5th Floor  
Redwood Shores, CA 94065  
Telephone: (650) 801-5000  
Facsimile: (650) 801-5100

*Attorneys for Defendant; additional counsel  
listed in signature blocks below*

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA, SAN JOSE DIVISION

CHASOM BROWN, WILLIAM BYATT,  
JEREMY DAVIS, CHRISTOPHER  
CASTILLO, and MONIQUE TRUJILLO,  
individually and on behalf of all similarly  
situated,

Plaintiffs,

v.

GOOGLE LLC,  
Defendant.

Case No. 4:20-cv-03664-YGR-SVK

**JOINT LETTER BRIEF RE: GOOGLE'S  
RESPONSES TO PLAINTIFFS'  
REQUESTS FOR ADMISSIONS AND  
INTERROGATORIES**

Referral: Hon. Susan van Keulen, USMJ

1 March 4, 2022

2 Submitted via ECF

3 Magistrate Judge Susan van Keulen  
4 San Jose Courthouse  
5 Courtroom 6 - 4th Floor  
6 280 South 1st Street  
7 San Jose, CA 95113

8 Re: Joint Submission re Google's RFA and Rog Responses  
9 *Brown v. Google LLC*, Case No. 4:20-cv-03664-YGR-SVK (N.D. Cal.)

10 Dear Magistrate Judge van Keulen:

11 Pursuant to Your Honor's November 2021 Civil and Discovery Referral Matters Standing  
12 Order, Plaintiffs and Google LLC ("Google") submit this joint letter brief regarding their dispute  
13 over Google's objections and responses to Plaintiffs' Requests for Admissions 57 and 63 and  
14 Interrogatories 11, 33, 34, 36, and 38. Counsel for the parties met and conferred on January 28 and  
15 February 2, 2022 and reached an impasse on these disputes. Today is the close of fact discovery. A  
16 trial date has not yet been set. Exhibit A includes a chart with each of the discovery requests at issue,  
17 Google's objections and responses, and the parties' compromise proposals.  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

**PLAINTIFFS' STATEMENT**

Plaintiffs respectfully seek the Court's assistance in obtaining responses to Plaintiffs' Requests for Admissions 57 and 63 and Interrogatories 11, 33, 34, 36, and 38.

**Discovery Relating to Google's 2020 Incognito Detection Analysis**

With RFAs 57 and 63 and Interrogatory 34, Plaintiffs properly seek relevant information concerning Google's efforts in 2020 to identify, quantify, and monitor Chrome Incognito browsing data within Google's own logs. That is at the heart of this case, which concerns in part Google's logging and use of Chrome Incognito browsing data.

Plaintiffs recently moved to add Google employee Bert Leung as an additional custodian because he led these internal efforts to identify Incognito browsing data. *See* Dkt. 399 (Joint Letter Brief). The Court ordered Google to run hit counts for Plaintiffs' proposed search terms, and after running those hit counts, Google agreed to Plaintiffs' proposal and produced documents. Dkt. 406. Based on that production, Plaintiffs discovered for the first time that Google implemented a field within logs specifically to detect Incognito traffic.

In parallel, to try to streamline discovery and trial, Plaintiffs served these two RFAs and this Interrogatory seeking additional information about Google's Incognito detection analysis and whether Google can identify class members. Plaintiffs served this discovery consistent with the established rule that they "are entitled to discovery which may prove that the potential class members are identifiable and they meet the numerosity requirements." *McDonald v. Cotton States Mut. Ins. Co.*, 2015 WL 1138026, at \*4 (M.D. Ala. Mar. 13, 2015); *see also Maximiliano v. Simm Assocs., Inc.*, No. 17-CV-80341, 2017 WL 11477354, at \*2 (S.D. Fla. Nov. 8, 2017) (granting motion to compel pre-certification interrogatory response that Plaintiffs deemed "relevant to questions of ascertainability of the putative class"). "When a plaintiff seeks [information] on a pre-certification basis [regarding] ascertainability and numerosity, such information is discoverable." *Maximiliano*, 2017 WL 11477354, at \*2. Google has refused to provide this relevant discovery.

For example, **Interrogatory 34** asked Google to "Please identify every log and data source that Google reviewed, analyzed, or searched as part of Google's efforts to conduct a 'log analysis of Chrome Incognito' in and around mid-2020" (citing GOOG-CABR-05280756). That was a reasonable request, tied to the issues in this case. In response, Google identified just one data source, which was already mentioned in the document that Plaintiffs cited. Here is the entirety of Google's response: "Google used [REDACTED] in the analysis of Ad Manager browsing traffic described in GOOG-CABR-05280756." Plaintiffs did not waste an Interrogatory merely for Google to parrot back information that was already clear from the document. Google's response below pretends as if Mr. Leung's 2020 Incognito detection work was limited to the single document that Plaintiffs cited. *See* Google's portion (limiting its response to the analysis "referenced in that document"). The Interrogatory plainly asks about *any* log that Mr. Leung studied as part of his entire analysis over the course of 2020. Plaintiffs will use this information in their expert reports and to decide which data sources to select for searches before the Special Master. At this late stage of discovery, Google should not be playing hide the ball.

**RFA No. 57** also seeks relevant information focusing on the changes Google made to Incognito with "ChromeGuard" in 2020. Plaintiffs asked Google to admit that [REDACTED]

1 [REDACTED]  
 2 [REDACTED]  
 3 [REDACTED]  
 4 [REDACTED]  
 5 In conjunction with Mr. Leung's 2020 Incognito detection analysis, [REDACTED]  
 6 [REDACTED]  
 7 [REDACTED] See Dkt. 395 at 13-14, 16-17. [REDACTED]  
 8 [REDACTED] With this RFA, Plaintiffs merely  
 9 sought an admission that [REDACTED]  
 10 [REDACTED] But Google has evaded this RFA by making assertions that have  
 11 nothing to do with the RFA itself, using the RFA to present arguments regarding [REDACTED]  
 12 [REDACTED], and refusing to clarify whether [REDACTED]  
 13 [REDACTED] Plaintiffs respectfully request that the Court  
 14 order Google to respond to the substance of the RFA, without adding qualifications that are not  
 15 responsive to the RFA. This RFAs is "simple, direct and concise so [and] may be admitted or denied  
 16 with little or no explanation or qualification." *Morley v. Square, Inc.*, 2016 WL 123118, at \*3 (E.D.  
 17 Mo. Jan. 11, 2016). And this RFA serves the "purpose of streamlining issues and narrowing the  
 18 facts in dispute at trial." *Apple Inc. v. Samsung Elecs. Co.*, 2012 WL 952254, at \*4 (N.D. Cal. Mar.  
 19 20, 2012).

20 Finally, **RFA No. 63** asked Google to admit that "After this lawsuit was filed, Google placed  
 21 a litigation hold on every log or data source that Google reviewed, analyzed, or searched as part of  
 22 Google's efforts to conduct a 'log analysis of Chrome Incognito' in and around mid-2020. *See, e.g.*,  
 23 GOOG-CABR-05280756." Plaintiffs reasonably seek to know whether Google deemed these logs  
 24 or data sources relevant to this case, particularly in light of Google's repeated argument that it is  
 25 unable to identify class members. Google has refused to provide any response. This Request is now  
 26 even more relevant in light of Plaintiffs' sanctions motion. Dkt. 430.

### 27 Other Requests

28 **Interrogatory 33** very simply asks Google to identify the number and percentage of  
 websites that use each of Google Analytics and Google Ad Manager. Google initially misunderstood  
 the Interrogatory and therefore did not provide a meaningful response. Plaintiffs clarified the  
 meaning during meet-and-confers over a month ago. Yet Google still refuses to answer the substance  
 of the question. **Interrogatory 36** is related to the Court's recent order for Google to produce [REDACTED]  
 dashboard data. Dkt. 437-1, P27. Google provided some information in response to this  
 Interrogatory, but the information is inadequate, including because Google did not break down the  
 figures by platform upload rate (windows, mac, ios, Android), and because it is unclear whether the  
 data reflects raw figures or a figure adjusted for sampling.

**Interrogatory 38** asked Google to "identify and describe all instances during the Class  
 Period that Google is aware of (if any) when so-called 'unauthenticated data' was accessed by a bad  
 actor or hacker, within Google or outside of Google, who lacked permission from Google to access

the data.” Google has already identified over 90 logs and data sources where it is storing private browsing information from the private browsing activities of Plaintiffs and putative class members, which Plaintiffs contend was unlawfully collected and linkable to users and devices. The security of that sensitive information is plainly relevant, and Plaintiffs properly seek to discover whether the security of that information has already been compromised. Google’s storage of that data puts Plaintiffs and putative class members at risk, and Plaintiffs are entitled to know whether that data has already been accessed without permission.

Finally, **Interrogatory No. 11** asked Google to “Please describe in detail all Google matching tables that store joinability keys (referenced in GOOG-BRWN-00027533) for Google Analytics, Google Ad Manager, Google Chrome, and Chromium.” This is relevant – and discrete – discovery regarding how Google actually joins and can join the data at issue in case. In response, Google merely directed Plaintiffs to five submissions that Google made to Special Master Brush in which, according to Google, “field names of the relevant data sources were provided.” But numerous field names were provided in those submissions, and it unfair to force Plaintiffs to guess which fields are responsive to this Interrogatory. To the extent Google’s incorporation-by-reference approach is even permissible, the response must at least “include[] some parenthetical descriptions in support of the responses” which identify specific portions of the incorporated documents. *Nguyen v. Bartos*, No. 2:10-CV-1461 WBS KJN, 2011 WL 4443314, at \*2 (E.D. Cal. Sept. 22, 2011). Interrogatory 11 is a straightforward request, and Plaintiffs simply ask that Google provide a supplemental response that identifies the specific relevant fields.

## **GOOGLE’S STATEMENT**

### **Discovery Relating to Google’s 2020 Incognito Analysis**

First, in **Interrogatory No. 34**, Plaintiffs have requested an identification of “every log and data source that Google reviewed, analyzed, or searched as part of Google’s efforts to conduct a ‘log analysis of Chrome Incognito’ in and around mid-2020 (citing GOOG-CABR-05280756). But Google has already provided a complete response. Google objected to the Interrogatory as unduly burdensome to the extent it purports to seek information regarding Google Search Ads because Plaintiffs have expressly limited their purported class to users “who accessed a non-Google website containing Google Analytics or Ad Manager.” Subject to that and other objections, Google responded that “Google used [REDACTED] in the analysis of Ad Manager browsing traffic described in GOOG-CABR-05280756.”

Plaintiffs complain that the data source Google identified “was already mentioned in the document that Plaintiffs cited,” but that does not mean Google’s response is inaccurate. To the contrary, it means the document’s identification of a single data source for the analysis of relevant browsing traffic was complete. Plaintiffs argue that “[i]f there was only one data source, then Google should say that.” But that is exactly what Google has done. Google responded to an Interrogatory seeking “every log and data source” by identifying the single data source used for the relevant portion of the log analysis. Google’s current response to this Interrogatory is clear and no further response is necessary.

For the avoidance of doubt, Google confirms that there are two data sources identified in the document cited in Interrogatory No. 34. Those are the only two data sources that were used for the “log analysis of Chrome Incognito” referenced in that document. However, Google’s response to this Interrogatory did not identify one of the two sources because it relates to Search Ads, which is outside the scope of Plaintiffs’ purported class, for the reasons stated in Google’s objections—specifically, Plaintiffs have expressly limited their purported class to users “who accessed a non-



1 Google website containing Google Analytics or Ad Manager.” Dkt. 136-1 ¶ 192; *see also* June 2,  
2 2021 Hearing Tr. 35:13-16 (discovery “is not carte blanche to all of Google’s systems . . . and it will  
continue to tie back to the proper definitions of the class”).

3 Plaintiffs’ **RFA No. 57** is insolubly ambiguous because, in the context of the referenced  
4 ChromeGuard analyses, the phrase [REDACTED]  
5 [REDACTED] does not have a clear and reasonably definite  
6 meaning. For example, the RFA does not make clear whether [REDACTED]  
7 [REDACTED] refers to information relating to private  
8 browsing in Chrome (i.e., in Incognito mode), or whether it would include information relating to  
private browsing in browsers other than Chrome. Furthermore, to the extent Plaintiffs intended the  
RFA to encompass private browsing mode in other browsers, the RFA is still ambiguous because  
the referenced analyses related to [REDACTED]  
[REDACTED]

9 Google objected on the basis of these ambiguities and stands by that objection. However,  
10 as permitted under Federal Rule of Civil Procedure 36(a)(4), Google provided a good faith qualified  
11 admission that fairly responds to the substance of the matter, to the best of Google’s ability to  
12 understand it. Specifically, Google admitted that the referenced analyses “were not intended to and  
do not reliably account for Google’s revenues as they relate to private browsing information,” and  
otherwise denied. That is a fair response to the substance of the RFA. Plaintiffs now assert that  
they sought in the RFA an admission that the [REDACTED]  
[REDACTED]  
13 [REDACTED] This is not a fair characterization of the  
RFA itself and fails to clarify the ambiguity described above.

14 Google has objected to Plaintiffs’ **RFA No. 63** because it is not a proper request under Rule  
15 36. Requests for admission may address “the truth of any matters within the scope of Rule 26(b)(1)”  
that relate to either “facts, the application of law to fact, or opinions about either,” or, “the  
16 genuineness of any described documents.” Fed. R. Civ. Proc. 36(a). RFA No. 63 does not seek an  
admission regarding facts relevant to the case or the application of law to any such fact. Rather, this  
Request relates to discovery in this case, improperly seeking discovery on discovery.

### 17 Other Requests

18 Plaintiffs’ **Interrogatory No. 33** seeks information “regarding the total number and  
19 percentage of non-Google websites using Google Analytics and/or Google Ad Manager, where  
Google would have received private browsing information.” Google provided a complete response  
20 to the Interrogatory as framed, confirming that it is not able to determine total number or percentages  
of visits to non-Google websites using Google Analytics and/or Google Ad Manager while in a  
21 private browsing mode. Google also provided two reasons for this, namely: (1) Chrome is designed  
to prevent websites, and the third-party services installed on those websites such as Google  
22 Analytics and Google Ad Manager, from detecting whether a user is in a private browsing mode;  
and (2) Google has no way of determining how often users use private browsing modes on other  
23 browsers. This is a fulsome response to the Interrogatory posed to Google.

24 Plaintiffs now seek to recast the Interrogatory as asking Google to “identify the number and  
percentage of websites that use each of Google Analytics and Google Ad Manager.” But this is not  
25 what the Interrogatory requested, and Plaintiffs’ attempt to rewrite it at the close of fact discovery  
is inappropriate.

26 In **Interrogatory No. 36**, Plaintiffs requests that Google “identify Incognito usage statistics  
27 for the USA, broken down by (1) the number of unique chrome instances within the United States,  
(2) the number of unique chrome instances within California that used Chrome Incognito, and (3)  
28 the number of unique chrome instances within the United States that used Chrome Incognito.”

1 Google responded with detailed statistics on the number of unique Chrome instances that appear to  
 2 be in the United States and the number of unique Chrome instances that appear to be in the United  
 3 States that used Chrome Incognito. Google also confirmed that it does not maintain information in  
 the ordinary course of business that can be used to show the number of unique Chrome instances  
 within California. This is a complete response to the Interrogatory.

4 Plaintiffs now assert that this information is inadequate “because Google did not break down  
 5 the figures by platform upload rate (windows, mac, ios, Android), and because it is unclear whether  
 the data reflects raw figures or a figure adjusted for sampling.” But this complaint rings hollow  
 6 given that the Interrogatory did not even request a breakdown by “platform upload rate.” With  
 respect to Plaintiffs’ query about whether the data “reflects raw figures or a figure adjusted for  
 sampling,” Google can confirm that the information in its response is based on raw data.

7  
 8 Plaintiffs’ **Interrogatory No. 38** seeks information regarding “all instances during the Class  
 Period that Google is aware of (if any) when so-called ‘unauthenticated data’ was accessed by a bad  
 actor or hacker, within Google or outside of Google, who lacked permission from Google to access  
 9 the data.” This Interrogatory is yet another example of Plaintiffs’ clear attempt to overreach. As a  
 result, Google has objected to this Interrogatory because it seeks information that is neither relevant  
 10 nor likely to lead to the discovery of admissible evidence. Plaintiffs’ complaint does not allege any  
 data breaches at Google. It does not contain allegations related to Google’s data security efforts.  
 11 And it does not reference any “hack[ing]” of Google’s servers. Plaintiffs argue that the “security”  
 of the private browsing information at issue in this case is “plainly relevant,” but have failed to  
 12 identify, nor could they identify, any claim or defense to which the “security” of data that is already  
 in Google’s possession is relevant.

13  
 14 Plaintiffs’ **Interrogatory No. 11** seeks a description of “ALL GOOGLE matching tables  
 that store joinability keys (referenced in GOOG-BRWN-00027533) for GOOGLE Analytics,  
 GOOGLE Ad Manager, GOOGLE Chrome, and Chromium, by stating: (a) the name of the matching  
 15 table, (b) where the matching table is stored, (c) what IDENTIFIERS are INCLUDED, (d) what  
 other data parameters and values are stored with the IDENTIFIERS, and (e) the retention period for  
 16 the matching table, for the entire CLASS PERIOD.” As described in Google’s Second  
 Supplemental Response to this Interrogatory, the term “joinability key” in this context refers to an  
 17 encrypted version of the relevant ID that is *designed to prevent joinability* across logs. And as part  
 of the discovery process managed by the Special Master in this case, Google has provided an  
 18 identification of relevant data sources and corresponding field names, which is exactly what this  
 interrogatory calls for (e.g., “the name of the matching table,” “what IDENTIFIERS are  
 19 INCLUDED,” “what other data parameters and values are stored with the IDENTIFIERS”).

20 Rule 33(d) permits a party to respond to an interrogatory by specifying documents where  
 “the answer to an interrogatory may be determined by examining” the documents, and “the burden  
 21 of deriving or ascertaining the answer will be substantially the same for either party.” That is  
 precisely the case here—Google has identified in its Second Supplemental Response specific  
 22 documents provided to Plaintiffs and the Special Master that contain responsive information.  
 Plaintiffs complain that “numerous field names were provided” in the Special Master submissions  
 23 identified by Google, and that “it [is] unfair to force Plaintiffs to guess which fields are responsive  
 to this Interrogatory.” But this misses the point – the Interrogatory generally requests identification  
 24 of data parameters and values stored in the identified tables. Thus, based on the plain language of  
 the Interrogatory, all of the fields identified in Google’s submissions to the Special Master are  
 25 responsive, by virtue of the fact that they are all part of the identified data sources.



1 Dated: March 4, 2022

Respectfully,

2 QUINN EMANUEL URQUHART &  
3 SULLIVAN, LLP

BOIES SCHILLER FLEXNER LLP

4 /s/ Andrew H. Schapiro

/s/ Mark C. Mao

5 Andrew H. Schapiro (admitted *pro hac vice*)  
191 N. Wacker Drive, Suite 2700  
Chicago, IL 60606  
6 Tel: (312) 705-7400  
7 Fax: (312) 705-7401

Amanda Bonn (CA Bar No. 270891)  
abonn@susmangodfrey.com  
SUSMAN GODFREY L.L.P.  
1900 Avenue of the Stars, Suite 1400  
Los Angeles, CA 90067  
Tel: (310) 789-3100

8 Stephen A. Broome (CA Bar No. 314605)  
sb@quinnemanuel.com

Mark C. Mao (CA Bar No. 236165)  
mmao@bsflp.com  
Sean Phillips Rodriguez (CA Bar No.  
262437)  
srodriguez@bsflp.com  
Beko Reblitz-Richardson (CA Bar No.  
238027)

9 Viola Trebicka (CA Bar No. 269526)  
violatrebicka@quinnemanuel.com  
865 S. Figueroa Street, 10th Floor  
Los Angeles, CA 90017  
10 Tel: (213) 443-3000  
11 Fax: (213) 443-3100

brichardson@bsflp.com  
44 Montgomery Street, 41<sup>st</sup> Floor  
San Francisco, CA 94104  
Tel: (415) 293 6858  
Fax: (415) 999 9695

12 Josef Ansorge (admitted *pro hac vice*)  
josefansorge@quinnemanuel.com  
13 1300 I Street NW, Suite 900  
Washington D.C., 20005  
14 Tel: (202) 538-8000  
15 Fax: (202) 538-8100

James W. Lee (*pro hac vice*)  
jlee@bsflp.com

16 Jonathan Tse (CA Bar No. 305468)  
jonathantse@quinnemanuel.com  
50 California Street, 22nd Floor  
San Francisco, CA 94111  
17 Tel: (415) 875-6600  
18 Fax: (415) 875-6700

Rossana Baeza (*pro hac vice*)  
rbaeza@bsflp.com  
100 SE 2<sup>nd</sup> Street, Suite 2800  
Miami, FL 33130  
Tel: (305) 539-8400  
Fax: (305) 539-1304

19 Thao Thai (CA Bar No. 324672)  
thaothai@quinnemanuel.com  
20 555 Twin Dolphin Drive, 5th Floor  
Redwood Shores, CA 94065  
21 Tel: (650) 801-5000  
22 Fax: (650) 801-5100

William Christopher Carmody (*pro hac vice*)  
bcarmody@susmangodfrey.com  
Shawn J. Rabin (*pro hac vice*)  
srabin@susmangodfrey.com  
Steven Shepard (*pro hac vice*)  
sshepard@susmangodfrey.com  
Alexander P. Frawley (*pro hac vice*)  
afrawley@susmangodfrey.com  
SUSMAN GODFREY L.L.P.  
1301 Avenue of the Americas, 32<sup>nd</sup> Floor  
New York, NY 10019  
Tel: (212) 336-8330

23 *Attorneys for Defendant Google LLC*

John A. Yanchunis (*pro hac vice*)  
jyanchunis@forthepeople.com  
Ryan J. McGee (*pro hac vice*)

[rmcgee@forthepeople.com](mailto:rmcgee@forthepeople.com)  
MORGAN & MORGAN, P.A.  
201 N Franklin Street, 7th Floor  
Tampa, FL 33602  
Tel: (813) 223-5505  
Fax: (813) 222-4736

Michael F. Ram (CA Bar No. 104805)  
[mram@forthepeople.com](mailto:mram@forthepeople.com)  
MORGAN & MORGAN, P.A.  
711 Van Ness Avenue, Suite 500  
San Francisco, CA 94102  
Tel: (415) 358-6913

*Attorneys for Plaintiffs*

**ATTESTATION OF CONCURRENCE**

I am the ECF user whose ID and password are being used to file this Joint Letter Brief.  
Pursuant to Civil L.R. 5-1(i)(3), I hereby attest that each of the signatories identified above has  
concurred in the filing of this document.

Dated: March 4, 2022

By /s/ Andrew H. Schapiro  
Andrew H. Schapiro